

## TWO NEW ASCLEPIADS FROM THE WESTERN UNITED STATES<sup>1</sup>

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During the preparation of a revision of the North American species of *Asclepias*, two novelties from the western United States have been encountered which it seems well to record, since the date of publication of the complete work is uncertain.

**ASCLEPIAS Davisii** Woodson, spec. nov. (fig. 1). Herbae perennes parvulae subsucculentae prostratae; caules basi fasciculati 1.0–1.5 dm. longi plus minusve compressi simplices glabri; folia opposita late ovata vel ovato-elliptica apice obtusa vel abrupte breviterque acuminata basi late obtusa aut rotundata aut late obscureque cordata non rarius plus minusve decurrentia cum petiolo ca. 0.2–0.4 cm. longo 3.0–4.5 cm. longa 1.5–4.0 cm. lata inferne multo minora dilute viridia plus minusve glaucescentia glabra; inflorescentia terminalis umbelliformis 5–15-flora sessilis, foliis minoribus 1–2 subtendentibus, pedicellis 2 cm. longis glabris; calycis lobi elliptico-lanceolati acuminati 0.6 cm. longi sparse pilosuli; corollae rotatae dilute luteo-viridis lobi patuli ovato-elliptici late acuti 1.0–1.2 cm. longi 0.6–0.7 cm. lati intus papillati vel minute pilosuli extus apicem versus plus minusve purpurissati; staminum columna carnosae ca. 0.3 cm. altae, antherae 0.25 cm. longae dilute viridulae apicibus scariaceis obtusis inflexis, alis aequilateralibus late obtusis integris, coronae foliolae calceolatae carnosae livide purpurissatae 0.5 cm. longae 0.35 cm. latae compressae prope margines interiores ca. 0.1 cm. longae abrupte apiculatae basi columnam totam adnatae, corniculo incurvato adnato omnino incluso vel nullo; pollinia ca. 1.5 mm. longa compressa anguste inaequaliterque pyriformia, caudiculis gracilibus tortulis ca. 0.5 mm. longis, corpusculo compresse rhomboideo ca. 0.25 mm. longo; folliculi non visi.

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IDAHO: Glenn's Ferry, Elmore County, May 15, 1938, *R. J. Davis 85* (Herb. Missouri Bot. Garden, TYPE); OREGON: loose soil, high hillsides opposite Lloyd Humphrey's ranch, Grant County, April 30, 1925, *L. F. Henderson s.n.* (Herb. Missouri Bot. Garden).

Professor Davis writes me: "The plant grows prostrate on the ground with nothing but the ends of the branches turned slightly upward. The stem is a pale green color, but I did not

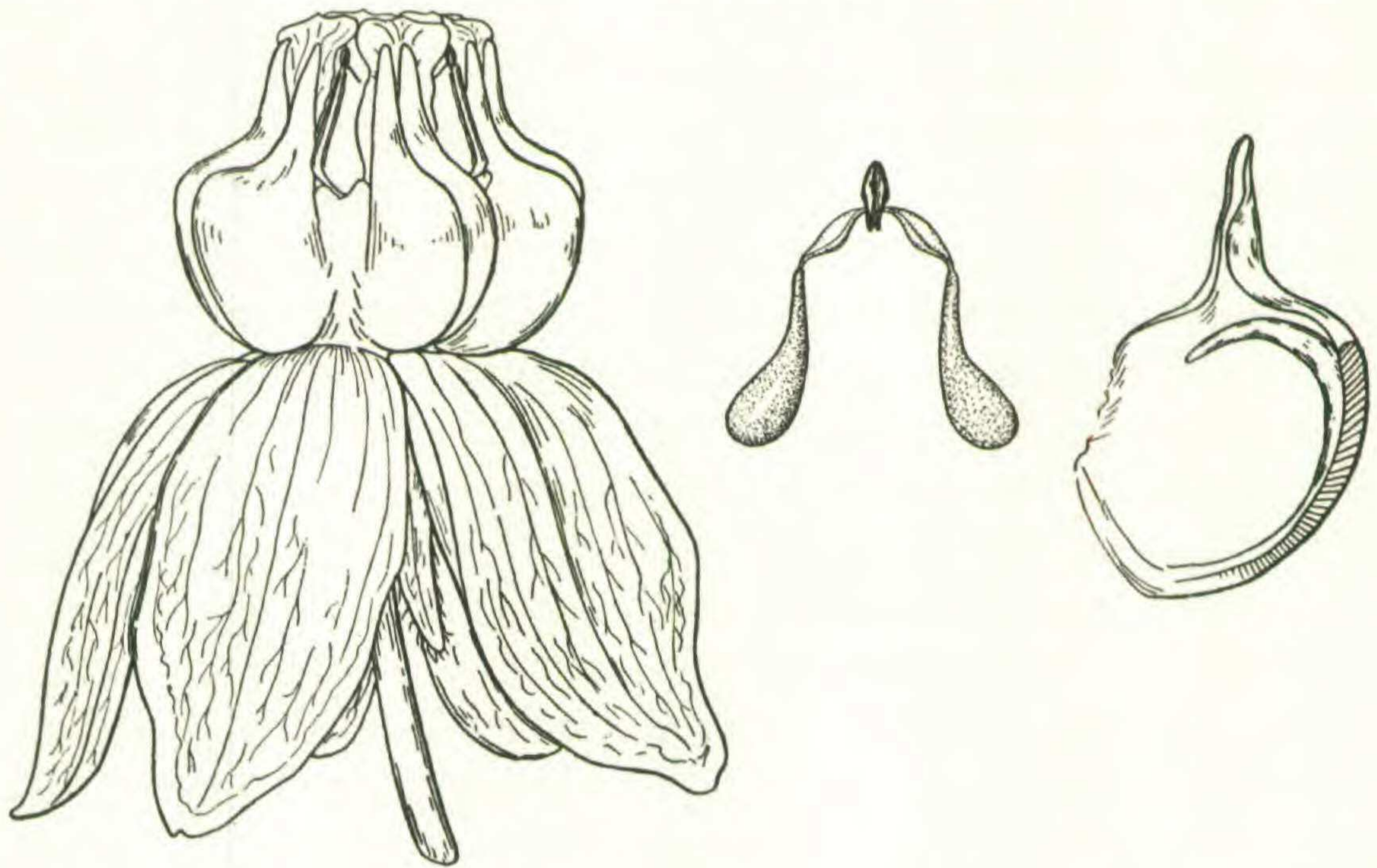


Fig. 1. *Asclepias Davisii* Woodson. Flower, pollinia, and hood in longitudinal section. (Drawn by A. A. Heinze.)

look particularly to see whether it was flattened or not. . . . It seems to grow only on barren alkaline clay knolls. There was no plant of it found growing where any other vegetation grew."

*A. Davisii* closely simulates *A. Cryptoceros* Wats. in general appearance and distribution and is doubtless closely related to it. In the former, however, the corona hoods are more abruptly apiculate and scarcely attain the anther-head which they considerably surpass in the latter, where the flowers are somewhat larger as well.

The two specimens cited, although essentially similar, show certain dissimilarities of the corona: the hoods of *Davis 85* are more abruptly and shortly apiculate and are without the



inconspicuous, incurved horn characteristic of *Henderson s.n.* The character of the horn appears to be unusually inconstant in certain species of the western United States, notably in *A. californica* where I have observed a series of intergradations from a very definite structure to complete obsolescence. Similar variation is shown strikingly in the following species as well.

*ASCLEPIAS Cutleri* Woodson, spec. nov. (fig. 2). Herbae perennes parvulae; caules basi fasciculati suberecti 1-2 dm.

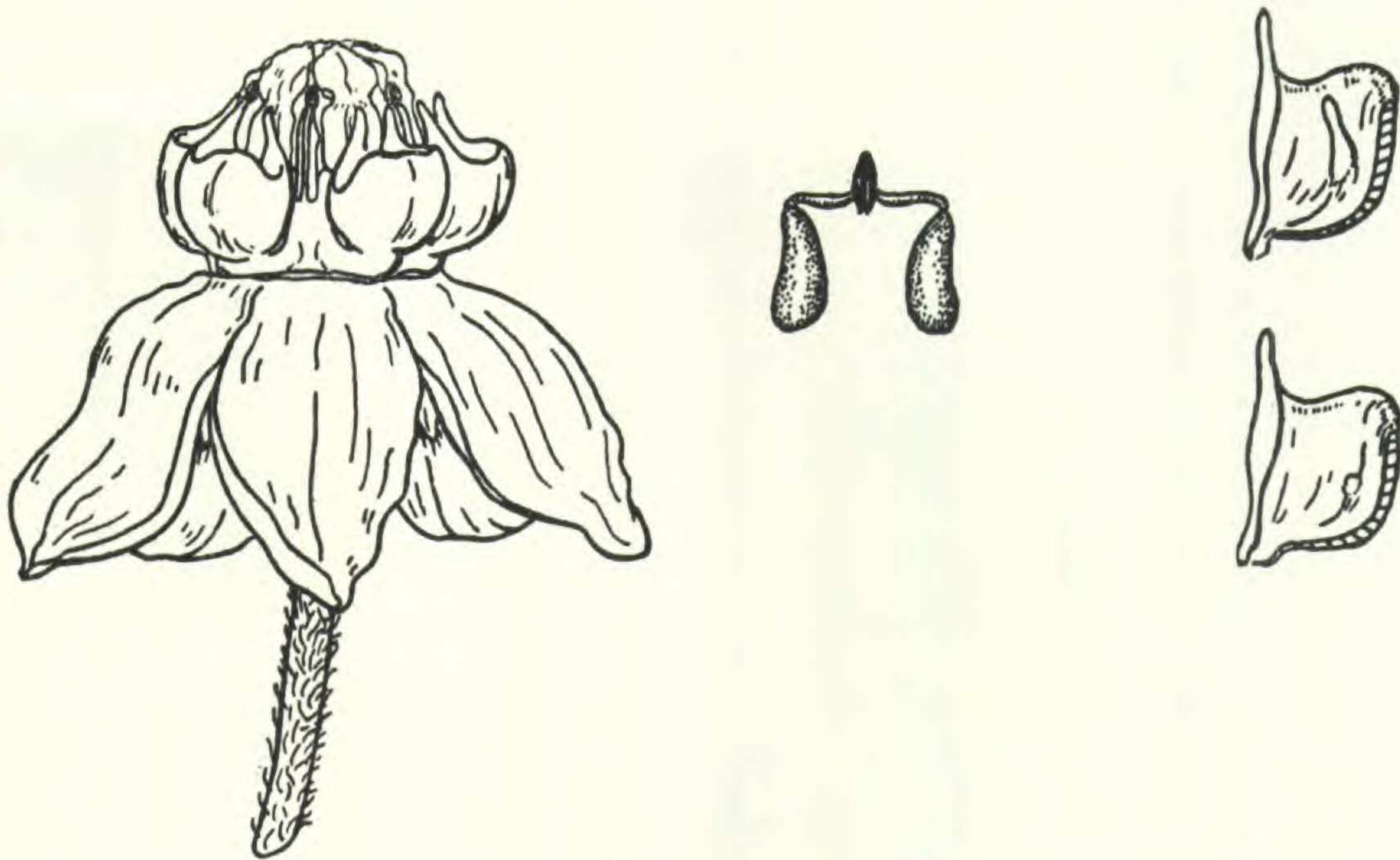


Fig. 2. *Asclepias Cutleri* Woodson. Flower, pollinia, and two hoods in longitudinal section to show variation of the horn. (Drawn by A. A. Heinze.)

alti tenues simplices vel rarius pauciramosi minute pilosuli; folia opposita vel approximata subsessilia linearia apice acuminata basi attenuata cum petiolo vix bene manifesto 4-8 cm. longa ut videntur subsucculenta minute pilosula dilute viridia; inflorescentia in axillis foliorum lateralis pauciflora brevissime pedunculata vel verisimiliter sessilis, pedicellis ca. 1 cm. longis minute pilosulis; calycis lobi ovato-lanceolati acuminati dense pilosuli; corollae rotatae dilute lividae lobi patuli ovato-elliptici late acuti 0.5-0.6 cm. longi ca. 0.2 cm. lati extus minute sparseque pilosuli intus minutissime papillati; staminum columna carnosca ca. 0.1 cm. alta inter foliolas coronae saccata, antherae 0.15 cm. longae apicibus scariaceis obtusis inflexis,



alis obtusis integris; pollinia compresse subrhomboideo-pyri-formia ca. 0.75 mm. longa, caudiculis corpusculoque ca. 0.25 mm. longis, coronae foliolae saccatae carnosae 0.15 cm. longae dorso obtusae, lobulis lateralibus acutis prominentibus, corniculo parvo vel subnullo incluso; folliculi penduli ovato-fusi-formes ca. 5 cm. longi dense pilosuli.

ARIZONA: rare on sands, 5 mi. west of Rock Point, Apache County, June 15, 1938, *H. C. Cutler 2177* (Herb. Missouri Bot. Garden, TYPE).

This species obviously is most closely related to *A. brachystephana* Engelm. and *A. uncialis* Greene, from both of which it differs in its habit and narrower foliage, as well as in technical details of the gynostegium. Perhaps most noteworthy is the fruit, since pendulous follicles previously have been known to occur only in *A. perennis* and *A. albicans* amongst the species of the United States.